

USDA-APHIS Peer Review of “White Paper: Perspective on Creeping Bentgrass (*Agrostis stolonifera* L.)”

BACKGROUND

The White Paper that is the subject of this review was developed by USDA-APHIS’ Biotechnology Regulatory Services to summarize the biology and ecology of creeping bentgrass (*Agrostis stolonifera* L.). APHIS has been petitioned to grant non-regulated status to a strain of creeping bentgrass genetically engineered to be tolerant to the herbicide glyphosate¹. This White Paper was used to support APHIS’ preliminary risk assessment of this strain. Additionally, it was one of several documents used to inform the decision to prepare an environmental impact statement (EIS) under the National Environmental Policy Act to assess potential impacts of granting the petition².

The White Paper may be used as a supporting document in the development of this EIS by providing important background information on the biology and ecology of untransformed creeping bentgrass to inform risk assessment of the transformed variety. A revised version of this document may be published in a peer-reviewed scientific journal at a future date. However, because the information in this document in its present form is likely to influence important APHIS decision-making before such publication, it is important that it undergo formal expert peer review at this time.

The Executive Office of Management and Budget (OMB) recently provided guidelines for the peer review of scientific information developed and disseminated by the government in order to improve information quality and credibility³. Of particular importance in the OMB guidelines is the review of scientific information deemed to be a “highly influential scientific assessment.” A scientific assessment is defined as

“...an evaluation of a body of scientific or technical knowledge, which typically synthesizes multiple factual inputs, data, models, assumptions, and/or applies best professional judgment to bridge uncertainties in the available information.”

A scientific assessment is “highly influential” if it is novel, controversial, precedent-setting, or has significant interagency interest, or if its dissemination could have a potential economic impact greater than \$500 million dollars in any one year. USDA-APHIS believes that this White Paper meets the definition of a “highly influential scientific assessment” which requires formal scientific peer review as outlined in the OMB guidelines.

PEER REVIEW PROCESS

Expert peer reviewers have been selected by APHIS, in consultation with outside experts, based upon subject-matter expertise and independence from APHIS decision-making. After reviewing the White Paper, each reviewer will submit a Reviewer Report to the APHIS Peer Review Manager assigned to this document. APHIS will then prepare a Response to Reviewers’ Comments. The original White Paper document, Reviewer Reports, and APHIS Response will all be made available for public comment on an APHIS website: http://www.aphis.usda.gov/peer_review/index.html

Because transparency is an important component of regulatory decision-making, this peer review process is only partially anonymous. A list of peer reviewers’ names and institutional affiliations will be publicly disclosed, as will all Reviewer Reports provided by reviewers. However, individual reviewer names will

¹ 69 FR 315-317, Docket No. 03-101-1, January 5, 2004.

² 69 FR 57257-57260, Docket No. 03-101-2, September 4, 2004.

³ 70 FR 2664-2677, Docket No. 05-769, January 14, 2005.

not be associated with individual Reviewer Reports. This information will be known only by the Peer Review Manager.

INSTRUCTIONS TO REVIEWERS

When reviewing the White Paper, please consider the following criteria:

- **Scope & Depth** – Does the document adequately review the body of scientific knowledge on the subject of *A. stolonifera* biology and ecology? Are any significant references omitted?
- **Currency** – Does the document reflect current scientific thinking on the subject? Are references cited that are superseded by more recent literature?
- **Clarity and Focus** – Is the purpose of the document clear? Are any sections vague or ambiguous?
- **Accuracy** – Is any information in the document factually incorrect? Does the document accurately characterize the content of references cited? Are conclusions and summary statements drawn in the document scientifically justified? Does the document clearly identify significant areas of scientific uncertainty on the subject?
- **Objectivity** – Does the document present the body of scientific knowledge on this subject in a fair, objective manner? Are references selectively cited or discussed in such a way as to introduce bias into the document? Are judgments the author makes regarding scientific uncertainty reasonable?

Please *do not* consider the following:

- **Minor editorial changes** to word choice, style, grammar, etc.
- **Environmental impacts** of transgenic varieties of *A. stolonifera*. Risk assessment of transgenic varieties of creeping bentgrass is beyond the scope of this support document, and will be considered fully in future NEPA documents developed by USDA-APHIS.
- **Regulatory and policy implications** of the information contained in the document. Opportunity to provide comment on these subjects is provided at future points in the NEPA process.

After carefully reviewing the White Paper using the criteria outlined above, please answer the following question:

Does this White Paper accurately and objectively assess current scientific knowledge on *Agrostis stolonifera*?

Please select one of the following responses:

- (1) Yes, subject to minor editorial changes (if any).
- (2) Yes, but only after revisions have been made to address specific weaknesses.
- (3) No, this White Paper has significant shortcomings in its assessment of current scientific knowledge on *Agrostis stolonifera*.

Please summarize your scientific review findings in a Reviewer Report. The Report should clearly state your selected response (1, 2 or 3) to the question above, and include enough supporting detail to justify your conclusions. Use the criteria listed above to guide your discussion. Cite specific examples in the document text where possible. If your response to the White Paper review is option (2) or (3), your Report should be detailed enough for the document's author to revise the work either to address your

criticisms adequately without further peer review (option 2) or to improve the document sufficiently to merit future submission for similar peer review (option 3).

Do not include any personal identifying information in the Reviewer Report. Please submit your Reviewer Report with a signed cover letter to the Peer Review Manager by Feb. 03, 2006.